

Set	Items	Description
S1	19609	(REED OR PROXIMITY OR MAGNET?) (2N) SWITCH?
S2	1172	PEDOMET? OR (STEP OR STRIDE) () COUNT???
S3	483890	SPHYGMOMANOMET? OR BODY() (FAT OR TEMPERATURE) OR BLOOD() PRESSURE OR PULSE OR HEART() RATE? ? OR HEARTRATE OR BODY() (WEIGHT OR MASS) OR BMI
S4	55125	(PHYSIOLOG? OR BIOLOGY OR BIOLOGICAL OR BODY OR EXERCISE OR FITNESS) (2N) (MEASURE? OR DATA OR DATUM OR INFORMATION?)
S5	1030512	COMPUTER OR INTERNET OR PC OR PDA OR PERSONAL() DATA() ASSISTANT OR (CELL OR CELLULAR OR MOBILE) () (PHONE OR TELEPHONE)
S6	2285278	TRANSMIT? OR TRANSMISSION OR SEND OR SENDS OR SENT OR SENDING
S7	1937850	RECEIV??? OR RECEIPT? ?
S8	333018	WIRELESS? OR WIRE() LESS OR INFRARED? OR INFRA() RED OR IR OR RADIOFREQUENC? OR RADIO() FREQUENC? OR RF OR BLUETOOTH OR BLUE() TOOTH
S9	2199433	IC=(A61B? OR A61D? OR A61M? OR A61H? OR G06F? OR H01H? OR - H04B?)
S10	0	S1 AND S2:S4 AND S5 AND S6:S7 AND S8
S11	1448	S1 AND S2:S4
S12	1	S1 AND S2:S4 AND S5 AND S8
S13	48	S1 AND S2:S4 AND S8
S14	18	S13 AND S9
S15	8	S1 AND S2:S4 AND S5 AND S7:S8
S16	7	S15 NOT (S12 OR S14)
S17	18	S1 AND S2:S4 AND S5 AND S6:S7
S18	4	S17 AND S9
S19	3	S18 NOT (S12 OR S14 OR S16)
S20	15	S1(S)S2:S4(S)S8
S21	8	S20 NOT (S12 OR S14 OR S16 OR S19)
S22	118	(S1(S)S2:S4) AND S9
S23	7	S22 AND S5
S24	3	S23 NOT (S12 OR S14 OR S16 OR S19 OR S21)
? show files		
File 347:JAPIO Nov 1976-2005/Aug (Updated 051205)		
(c) 2005 JPO & JAPIO		
File 350:Derwent WPIX 1963-2006/UD,UM &UP=200606		
(c) 2006 Thomson Derwent		
?		

14/5/4 (Item 3 from file: 350)
DIALOG(R) File 350:Derwent WPIX
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016122422 **Image available**
WPI Acc No: 2004-280298/200426
Related WPI Acc No: 2005-295672; 2005-314903; 2005-713762
XRAM Acc No: C04-108082
XRXPX Acc No: N04-221989

Sensing apparatus, for detecting human physiological and contextual information from body of wearer, includes flexible section to engage at least portion of the body, sensors supported by housing, and processing unit

Patent Assignee: BODYMEDIA INC (BODY-N); BOEHMKE S K (BOEH-I); KASABACH C D (KASA-I); STIVORIC J M (STIV-I); TELLER E (TELL-I)

Inventor: BOEHMKE S K; KASABACH C D; STIVORIC J M; TELLER E

Number of Countries: 106 Number of Patents: 006

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
US 20040039254	A1	20040226	US 2002227575	A	20020822	200426 B
WO 200419172	A2	20040304	WO 2003US26261	A	20030821	200426
AU 2003259983	A1	20040311	AU 2003259983	A	20030821	200457
EP 1534126	A2	20050601	EP 2003793253	A	20030821	200536
			WO 2003US26261	A	20030821	
KR 2005032119	A	20050406	KR 2005703029	A	20050222	200564
JP 2005536260	W	20051202	WO 2003US26261	A	20030821	200582
			JP 2004529813	A	20030821	

Priority Applications (No Type Date): US 2002227575 A 20020822

Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes

US 20040039254 A1 68 A61B-005/00
WO 200419172 A2 E G06F-000/00

Designated States (National): AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NI NO NZ OM PG PH PL PT RO RU SC SD SE SG SK SL SY TJ TM TN TR TT TZ UA UG UZ VC VN YU ZA ZM ZW

Designated States (Regional): AT BE BG CH CY CZ DE DK EA EE ES FI FR GB GH GM GR HU IE IT KE LS LU MC MW MZ NL OA PT RO SD SE SI SK SL SZ TR TZ UG ZM ZW

AU 2003259983 A1 A61B-005/00 Based on patent WO 200419172
EP 1534126 A2 E A61B-005/04 Based on patent WO 200419172

Designated States (Regional): AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LT LU LV MC MK NL PT RO SE SI SK TR

KR 2005032119 A G06F-019/00

JP 2005536260 W 59 A61B-005/00 Based on patent WO 200419172

Abstract (Basic): US 20040039254 A1

NOVELTY - A sensing apparatus comprises a flexible section to engage at least a portion of a body of a wearer, a housing removably attached to the flexible section, sensor(s) supported by the housing, and a processing unit supported by the housing in electronic communication with the sensors. The sensors are physiological sensors or contextual sensors.

USE - For detecting human physiological and contextual information (s) from the body of a wearer, by generating three acoustic signals and generating heart-related parameters from the third signal (claimed).

ADVANTAGE - The novel system does not need to make measurements across the torso using at least two contact separated by some distance,

does not measure electrical activity of the heart, and is capable of detecting heart rate information and information relating to individual beats of the heart with high reliability under circumstances depending on factors including the proximity of the apparatus to the heart, the level of noise, and motion related to sound artifacts caused by movement of the body. It is also most reliable when worn in an ambient environment with a low level of ambient noise and when the body is not moving.

DESCRIPTION OF DRAWING(S) - The figure shows a diagram of the above system for monitoring physiological data and lifestyle over an electronic network.

pp; 68 DwgNo 1/39

Title Terms: SENSE; APPARATUS; DETECT; HUMAN; PHYSIOLOGICAL; INFORMATION; BODY; WEAR; FLEXIBLE; SECTION; ENGAGE; PORTION; BODY; SENSE; SUPPORT; HOUSING; PROCESS; UNIT

Derwent Class: J04; P31; S05; V04; W05

International Patent Class (Main): A61B-005/00 ; A61B-005/04 ; G06F-000/00 ; G06F-019/00

File Segment: CPI; EPI; EngPI

14/5/5 (Item 4 from file: 350)

DIALOG(R) File 350:Derwent WPIX

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015861974 **Image available**

WPI Acc No: 2004-019804/200402

Related WPI Acc No: 2001-565252; 2002-055492; 2002-328664; 2002-329321; 2002-462846; 2003-352076; 2003-777042; 2004-224222

XRPX Acc No: N04-015172

Magnetically sensitive actuator for electrical and optical circuits, has switch with magnet that provides electromagnetic field and conductor that provides potential to switch cantilever between two states

Patent Assignee: UNIV ARIZONA STATE (UYAR-N)

Inventor: RUAN M; SHEN J; WHEELER C

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
US 6633212	B1	20031014	US 99155757	P	19990923	200402 B
			US 2000496446	A	20000202	
			US 2000563595	A	20000503	
			US 2001799831	A	20010306	

Priority Applications (No Type Date): US 99155757 P 19990923; US 2000496446 A 20000202; US 2000563595 A 20000503; US 2001799831 A 20010306

Patent Details:

Patent No	Kind	Lan Pg	Main IPC	Filing Notes
US 6633212	B1	23	H01H-051/22	Provisional application US 99155757 CIP of application US 2000496446 Div ex application US 2000563595

Abstract (Basic): US 6633212 B1

NOVELTY - The actuator has a cantilever (112) with two states corresponding to open and closed states of a switch. The switch has a magnet (102) close to a substrate (104) to provide an electromagnetic field that maintains the cantilever in one of the two states. An electrode or electrical conductor (114) provides an electrical potential or electromagnetic pulse to switch the cantilever between the two states.

USE - Used for telecommunication, radio frequency

communication, portable electronics, consumer and industrial electronics, aerospace and electrical and optical circuits.

ADVANTAGE - The latching switch is reliable, simple in design, inexpensive, easy to manufacture and consumes less power, thereby providing economical communication.

DESCRIPTION OF DRAWING(S) - The drawing shows a side view of a latching relay.

Magnet (102)
Substrate (104)
Contacts (108, 508)
Cantilever (112)
Electrical Conductor (114)
Spacers (510, 512)
pp; 23 DwgNo 5/11

Title Terms: MAGNETIC; SENSITIVE; ACTUATE; ELECTRIC; OPTICAL; CIRCUIT; SWITCH; MAGNET; ELECTROMAGNET; FIELD; CONDUCTOR; POTENTIAL; SWITCH; CANTILEVER; TWO; STATE

Derwent Class: U21; V03; W02; W06

International Patent Class (Main): H01H-051/22

File Segment: EPI

14/5/8 (Item 7 from file: 350)

DIALOG(R) File 350:Derwent WPIX

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011431156 **Image available**

WPI Acc No: 1997-409063/199738

XRPX Acc No: N97-340480

Small sized audio equipment with electronic formula pedometer - has selection circuit changing switch for selecting electronic formula pedometer and wireless receiver

Patent Assignee: SANYO ELECTRIC CO LTD (SAOL)

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
JP 9181625	A	19970711	JP 96301997	A	19901220	199738	B

Priority Applications (No Type Date): JP 90U401190 U 19901220

Patent Details:

Patent No	Kind	Lan Pg	Main IPC	Filing Notes
JP 9181625	A	4		

Abstract (Basic): JP 9181625 A

The equipment consists of a pendulum (L) with which the axial attachment is performed at one end and a magnet (M) is connected to its other end. A magnetic switch (SW2) connected to the magnet is arranged on the oscillating path of the pendulum. A pedometer (1) provided by which the frequency of the pendulum is counted by the magnetic switch .

The wireless receiver (2) is also provided along with the pedometer . A selection circuit changing switch (SW1) is provided to select the pedometer and the wireless receiver. The flow of current to the magnetic switch is prevented by the selection circuit changing switch which selects the wireless receiver.

ADVANTAGE - Reduces noise under reception of wireless broadcast.

Dwg.1/3

Title Terms: SIZE; AUDIO; EQUIPMENT; ELECTRONIC; FORMULA; Pedometer ; SELECT; CIRCUIT; CHANGE; SWITCH; SELECT; ELECTRONIC; FORMULA; Pedometer ; WIRELESS ; RECEIVE

Derwent Class: S02; T05; W02; W03
International Patent Class (Main): H04B-001/16
International Patent Class (Additional): G06M-007/00
File Segment: EPI

14/5/9 (Item 8 from file: 350)
DIALOG(R) File 350:Derwent WPIX
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010723209 **Image available**
WPI Acc No: 1996-220164/199622
XRPX Acc No: N96-184878
Apparatus for bio-energy-therapy of "DATA-SI" type - has switch for modes of action, oscillator of infra - red radiation, permanent magnet , switching -over for channels and switch for power supply

Patent Assignee: ATAEV D I (ATAE-I)

Inventor: ATAEV D I

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
RU 2043759	C1	19950920	SU 5061472	A	19920904	199622 B

Priority Applications (No Type Date): SU 5061472 A 19920904

Patent Details:

Patent No	Kind	Lan Pg	Main IPC	Filing Notes
RU 2043759	C1	6	A61H-039/00	

Abstract (Basic): RU 2043759 C

The apparatus is comprised of generator (1) of pulse signal for action, manual setter (2) of frequency, frequency divider (3), switch (4) for modes of action, former (5) for duration of pulses, voltage amplifier (6), regulator of action amplitude (7), commutator (8) for output, acting electrodes (9).

The apparatus has two pairs of built-in electrodes (9) and assembly of pairs of carry-out electrodes (X). The oscillator of radiant energy is positioned on the frame and appears as a frequency indicator and assembly of carry-out oscillators of radiant energy, infra - red radiator, permanent magnet. The generator (1) is connected to autonomous power supply source (10) via switch (13) of channels having channel of radiant energy source (17), and a channel of infra - red radiation (14) also the source (15) of permanent magnetic field.

USE/ADVANTAGE - In action on acupuncture points by complex of light, heat and electric radiation with raised effectiveness. Bul.

26/20.9.95

Dwg.1/2

Title Terms: APPARATUS; BIO; ENERGY; THERAPEUTIC; DATA; TYPE; SWITCH; MODE; ACTION; OSCILLATOR; INFRA; RED; RADIATE; PERMANENT; MAGNET; SWITCH; CHANNEL; SWITCH; POWER; SUPPLY

Derwent Class: P33; P34; S05

International Patent Class (Main): A61H-039/00

International Patent Class (Additional): A61N-002/08; A61N-005/06

File Segment: EPI; EngPI

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16/5/3 (Item 3 from file: 347)
DIALOG(R) File 347:JAPIO
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01503170 **Image available**
SPEEDOMETER FOR BICYCLE

PUB. NO.: 59-214770 [JP 59214770 A]
PUBLISHED: December 04, 1984 (19841204)
INVENTOR(s): MIYAZAKI YOSHIFUMI
TANAKA TATEAKI
APPLICANT(s): SANYO ELECTRIC CO LTD [000188] (A Japanese Company or
Corporation), JP (Japan)
APPL. NO.: 58-089494 [JP 8389494]
FILED: May 20, 1983 (19830520)
INTL CLASS: [3] G01P-003/42
JAPIO CLASS: 46.1 (INSTRUMENTATION -- Measurement); 26.2 (TRANSPORTATION
-- Motor Vehicles)
JAPIO KEYWORD: R011 (LIQUID CRYSTALS); R131 (INFORMATION PROCESSING --
Microcomputers & Microprocessors)
JOURNAL: Section: P, Section No. 349, Vol. 09, No. 86, Pg. 4, April
16, 1985 (19850416)

ABSTRACT

PURPOSE: To achieve an appropriate arithmetic display with the minimum power consumption by increasing the number of interrupt processings of a computer by one only when the revolutions of a crank are computed.

CONSTITUTION: A wheel rotation sensor 3 comprises a magnet mounted on a wheel and a **reed switch** mounted on a stay pipe while a crank rotation sensor 4 does a magnet mounted on a crank shaft and a lead switch mounted on a body pipe. A counter clock 8 generates a time **pulse** serving as the time standard for the measurement of time and the computation of running speed. A plug of a switch MSW for setting the number of interrupts to be **received** as inserted into a jack and a specifying **pulse** is provided to a microcomputer 6 to alter the number of interrupts to be **received** to from 1 and 2. Then, the computation of the running speed and the running distance and the revolutions of the crank is done and then, the plug is pulled off the jack to alter the number of interrupts to be **received** from 2 to 1 by applying **pulse** whereby the computation of the running speed and the running distance alone can be done.

19/5/3 (Item 1 from file: 350)
DIALOG(R) File 350:Derwent WPIX
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003928990
WPI Acc No: 1984-074534/198412
XRXPX Acc No: N84-056055

Portable physical condition monitoring instrument for bicycle rider - has microcomputer measuring heart beat and informing rider when each pedal turn should be completed for constant speed

Patent Assignee: BIOTECHNOLOGY INC (BIOT-N)

Inventor: BIANCO F J; JIMINEZ O

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
US 4434801	A	19840306	US 82355329	A	19820308	198412 B

Priority Applications (No Type Date): US 82355329 A 19820308; US 80145765 A 19800430

Patent Details:

Patent No	Kind	Lan Pg	Main IPC	Filing Notes
US 4434801	A	22		

Abstract (Basic): US 4434801 A

The electronic instrument housing includes a digital computer responsive to signals indicative of the heart beat and travel distance. A clock source derives signals indicative of different physical activities of the rider. The distance signal is derived by mounting a permanent magnet in a reflector carried by wheel spokes of the bicycle.

A reed switch responds to fluid from the permanent magnet to derive a pulse for each wheel revolution. A pulse for each revolution of the bicycle sprocket assembly, derived by a second permanent magnet - reed switch combination, is coupled to the computer and combined with the clock source to derive a signal indicative of number of sprocket assembly turns per unit length of time. A cueing signal is sent to signal the cyclist when he should complete each pedal turn to assist in maintaining a constant forward speed, regardless of gear ratio. The cueing signal is derived by combining the pulses from the two reed switches with a desired forward speed signal.

0/10

Title Terms: PORTABLE; PHYSICAL; CONDITION; MONITOR; INSTRUMENT; BICYCLE; RIDE; MICROCOMPUTER; MEASURE; HEART; BEAT; INFORMATION; RIDE; PEDAL; TURN ; COMPLETE; CONSTANT; SPEED

Derwent Class: P31; S02; S05; W04

International Patent Class (Additional): A61B-005/02

File Segment: EPI; EngPI

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21/5/8 (Item 6 from file: 350)
DIALOG(R) File 350:Derwent WPIX
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001268663

WPI Acc No: 1975-F2559W/197520

R.F. powered implantable cardiac pacemaker - has selectively operable magnetic reed switch controlled by magnet outside patient's body

Patent Assignee: SORIN SOC RIC IMPIA (SORI-N)

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
GB 1394412	A	19750514			197520	B

Priority Applications (No Type Date): IT 7268661 A 19720525

Abstract (Basic): GB 1394412 A

An implantable cardiac pacemaker is powered by radio-frequency energy from a pulse-modulated transmitter. A selectively operable switch connects the output of the pacemaker to an output terminal or connects the output terminal to an input terminal connectable to the output of a second pacemaker which is battery-powered. The first pacemaker includes a tuned receiver-rectifier which detects the transmitted pulses and delivers a corresponding pulse. The output terminal feeds a heart electrode. The switch may be a **magnetic reed switch** controlled by a magnet outside the patient's body.

Alternatively the switch may be a solid-state device operable by the same **radio - frequency** energy as that which powers the first pacemaker so that when the transmitter is operating the first pacemaker feeds the output terminal.

Title Terms: POWER; IMPLANT; CARDIAC; PACEMAKER; SELECT; OPERATE; MAGNETIC; REED; SWITCH; CONTROL; MAGNET; PATIENT; BODY

Derwent Class: P34; S05

International Patent Class (Additional): A61N-001/36

File Segment: EPI; EngPI

?

Set Items Description
 S1 14869 (REED OR PROXIMITY OR MAGNET?) (2N) SWITCH?
 S2 2210 PEDOMET? OR (STEP OR STRIDE) () COUNT???
 S3 2967873 SPHYGMOMANOMET? OR BODY() (FAT OR TEMPERATURE) OR BLOOD() PRESSURE OR PULSE OR HEART() RATE? ? OR HEARTRATE OR BODY() (WEIGHT OR MASS) OR BMI
 S4 221290 (PHYSIOLOG? OR BIOLOGY OR BIOLOGICAL OR BODY OR EXERCISE OR FITNESS) (2N) (MEASURE? OR DATA OR DATUM OR INFORMATION?)
 S5 6320209 COMPUTER OR INTERNET OR PC OR PDA OR PERSONAL() DATA() ASSISTANT OR (CELL OR CELLULAR OR MOBILE) () (PHONE OR TELEPHONE)
 S6 3044324 TRANSMIT? OR TRANSMISSION OR SEND OR SENDS OR SENT OR SENDING
 S7 2496213 RECEIV??? OR RECEIPT? ?
 S8 2247162 WIRELESS? OR WIRE() LESS OR INFRARED? OR INFRA() RED OR IR OR RADIOFREQUENC? OR RADIO() FREQUENC? OR RF OR BLUETOOTH OR BLUE() TOOTH
 S9 0 S1 AND S2:S4 AND S5 AND S6:S7 AND S8
 S10 7 S1 AND S2:S4 AND S5 AND S8
 S11 7 RD (unique items)
 S12 79 S1 AND S2:S4 AND S8
 S13 40 S1(S)S2:S4(S)S8
 S14 37 S13 NOT (S10 OR PY=2005:2006)
 S15 22 RD (unique items)
 S16 1963790 SPHYGMOMANOMET? OR BODY() (FAT OR TEMPERATURE) OR BLOOD() PRESSURE OR HEART() RATE? ? OR HEARTRATE OR BODY() (WEIGHT OR MASS) OR BMI
 S17 6 S1 AND (S2 OR S4 OR S16) AND S8
 S18 5 S17 NOT S10
 S19 31 S1 AND (S2 OR S4 OR S16)
 S20 21 S19 NOT (S10 OR S17 OR PY=2005:2006)
 S21 10 RD (unique items)
 ? show files
 File 155: MEDLINE(R) 1951-2005/Dec 31
 (c) format only 2006 Dialog
 File 73: EMBASE 1974-2006/Jan 26
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 File 91: MANTIS(TM) 1880-2005/Jun
 2001 (c) Action Potential
 File 164: Allied & Complementary Medicine 1984-2006/Jan
 (c) 2006 BLHCIS
 File 2: INSPEC 1898-2006/Jan W1
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 File 144: Pascal 1973-2006/Jan W1

11/5/3 (Item 1 from file: 6)

DIALOG(R) File 6:NTIS

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2265842 NTIS Accession Number: ADA412528/XAB

Remote Monitoring of Daily Activities and Behaviors at Home
(Conference paper)

Ogawa, M. ; Ochiai, S. ; Otsuka, K. ; Togawa, T.

TOKYO MEDICAL AND DENTAL UNIV (JAPAN) INST OF BIOMATERIALS AND BIOENGINEERING.

Corp. Source Codes: 88888888; 442585

25 Oct 2001 5p

Languages: English Document Type: Conference proceeding

Journal Announcement: USGRDR0318

Presented at Annual International Conference of the IEEE engineering in Medicine and Biology Society (23rd) held in Istanbul, Turkey on 25-28 Oct 2001. See also ADM001351 for entire conference on cd-rom., The original document contains color images.

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NTIS Prices: PC A01/MF A01

Country of Publication: United States

In maintaining the health of people, both elderly and younger, it can be useful to monitor their health status through their daily routines in their own home. This paper reports on the remote monitoring of the daily routine behaviors in an ordinary house. We attempted to monitor the daily behaviors of a subject, mainly in the kitchen and dining room. Several sensors were installed, including **infrared** sensors to detect human movement, **magnetic switches** to detect the opening and closing of doors, a carbon dioxide sensor to detect presence of the subject, and temperature sensors at the kitchen sink to detect cooking. A 31- year-old man who lived alone was monitored for about three months. The output of sensors was recorded on a personal **computer** and the data were transferred to another site by the

Internet. Monitoring was performed fully automatically. As a result, daily habits could be clearly identified. Such monitoring can contribute to the maintenance of health.

Descriptors: *Meetings; *Remote detection; *Living standards; *Health care management; Monitoring; Data acquisition; Human **body**; Behavior; Daily occurrence; Habits; Motion detectors

Identifiers: Foreign reports; NTISDODXA

Section Headings: 57U (Medicine and Biology--Public Health and Industrial Medicine); 44C (Health Care--Community and Population Characteristics)
?

21/5/3 (Item 3 from file: 155)
DIALOG(R) File 155: MEDLINE(R)
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04844855 PMID: 1234509
An implantable transmitter for monitoring heart rate and respiratory frequency in diving ducks.

Woakes A J; Butler P J
Biotelemetry (SWITZERLAND) 1975, 2 (3-4) p153-60, ISSN 0301-5912
Journal Code: 0430774

Publishing Model Print
Document type: Journal Article
Languages: ENGLISH
Main Citation Owner: NLM
Record type: MEDLINE; Completed
Subfile: INDEX MEDICUS

An implantable telemetry transmitter is described for monitoring respiratory frequency and heart rate in animal physiological studies. The ECG is transmitted directly while the respiratory signal, derived from the temperature variation of the air in the respiratory tract, modulates the frequency of a subcarrier oscillator. A magnetic switch allows the implanted device to be switched on and off remotely. Details are given of the high packing density achieved by a modified cordwood method of construction. This system is being used to investigate the changes in heart rate and respiratory frequency associated with spontaneous diving in ducks, and typical results are presented.

Descriptors: *Ducks--physiology--PH; * Heart Rate ; *Respiration; *Telemetry--instrumentation--IS; Animals; Electrocardiography; Temperature; Transducers

Record Date Created: 19770128
Record Date Completed: 19770128

21/5/6 (Item 1 from file: 73)
DIALOG(R) File 73: EMBASE
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03843395 EMBASE No: 1989012349
A constant-load ergometer for measuring peak power output and fatigue
Williams J.H.; Barnes W.S.; Signorile J.F.
Neuromuscular Research Unit, Human Performance Laboratories, Department of Health and Physical Education, Texas A&M University, College Station, TX 77843 United States
Journal of Applied Physiology (J. APPL. PHYSIOL.) (United States) 1988, 65/5 (2343-2348)
CODEN: JAPHE ISSN: 0161-7567
DOCUMENT TYPE: Journal
LANGUAGE: ENGLISH SUMMARY LANGUAGE: ENGLISH

A constant-load cycle ergometer was constructed that allows maximal power output to be measured for each one-half pedal revolution during brief, high-intensity exercise. To determine frictional force, an electronic load cell was attached to the resistance strap and the ergometer frame. Dead weights were attached to the strap's free end. Flywheel velocity was recorded by means of a magnetic switch and two magnets placed on the pedal sprocket. Pedaling resulted in magnetically activated switch closures, which produced two electronic pulses per pedal revolution. Pulses and load cell output were recorded (512 Hz), digitized, and stored on disk via microcomputer. Power output was later computed for each pair of adjacent pulses, representing average power per one-half pedal revolution.

Power curves generated for each subject were analyzed for peak power output (the highest one-half pedal revolution average), time to peak power, power fatigue rate and index, average power, and total work. Thirty-eight males performed two 15-s tests separated by 15 min ($n = 16$) or 48 h ($n = 22$). Peak power output ranged from 846.0 to 1,289.1 W. Intraclass correlation analysis revealed high test-retest reliability for all parameters recorded on the same or different days ($R = 0.91-0.97$). No significant differences ($P > 0.05$) were noted between parameter means of the first and second tests. These results indicate that the ergometer described provides a means for conveniently and reliably assessing short-term power output and fatigue.

MEDICAL DESCRIPTORS:

*ergometer; * exercise ; *fatigue; * measurement ; *muscle action potential nonbiological model; controlled study; clinical article; human experiment; normal human; methodology; male; priority journal

SECTION HEADINGS:

002 Physiology

027 Biophysics, Bioengineering and Medical Instrumentation

035 Occupational Health and Industrial Medicine

21/5/7 (Item 2 from file: 73)

DIALOG(R) File 73:EMBASE

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00315988 EMBASE No: 1975088320

Implantable ECG transmitter employing a magnetic switch
Smith E.N.; Crowder W.E.

Dept. Biol., Baylor Univ., Waco, Tex. 76703 United States

J.APPL.PHYSIOL. 1974, 36/5 (634-635)

CODEN: JAPYA

DOCUMENT TYPE: Journal

LANGUAGE: ENGLISH

DRUG DESCRIPTORS:

*neurotransmitter

MEDICAL DESCRIPTORS:

*electrocardiography; * heart rate ; *implantation; *magnet; *telemetry
theoretical study

MEDICAL TERMS (UNCONTROLLED): endoradiosonde; radiotransmitter; switch

SECTION HEADINGS:

002 Physiology

027 Biophysics, Bioengineering and Medical Instrumentation

018 Cardiovascular Diseases and Cardiovascular Surgery

019 Rehabilitation and Physical Medicine

?

Set Items Description
 S1 5137 (REED OR PROXIMITY OR MAGNET?) (2N) SWITCH?
 S2 2314 PEDOMET? OR (STEP OR STRIDE) () COUNT???
 S3 784661 SPHYGMOMANOMET? OR BODY() (FAT OR TEMPERATURE) OR BLOOD() PRESSURE OR PULSE OR HEART() RATE? ? OR HEARTRATE OR BODY() (WEIGHT OR MASS) OR BMI
 S4 52321 (PHYSIOLOG? OR BIOLOGY OR BIOLOGICAL OR BODY OR EXERCISE OR FITNESS) (2N) (MEASURE? OR DATA OR DATUM OR INFORMATION?)
 S5 8774859 COMPUTER OR INTERNET OR PC OR PDA OR PERSONAL() DATA() ASSISTANT OR (CELL OR CELLULAR OR MOBILE) () (PHONE OR TELEPHONE)
 S6 3530326 TRANSMIT? OR TRANSMISSION OR SEND OR SENDS OR SENT OR SENDING
 S7 6176834 RECEIV??? OR RECEIPT? ?
 S8 1721276 WIRELESS? OR WIRE() LESS OR INFRARED? OR INFRA() RED OR IR OR RADIOFREQUENC? OR RADIO() FREQUENC? OR RF OR BLUETOOTH OR BLUE() TOOTH
 S9 0 S1 (S) S2:S4 (S) S5 (S) S6:S7 (S) S8
 S10 1 S1 (S) S2:S4 (S) S5 (S) S8
 S11 4 S1(S)S2:S4(S)S8
 S12 3 S11 NOT S10
 S13 7 S1(S)S2:S4(S)S5
 S14 6 S13 NOT (S10 OR S12)
 S15 6 RD (unique items)
 S16 122 S1(S)S2:S4
 S17 6 S1(S)S2:S4(S)S6:S7
 S18 6 S17 NOT (S10 OR S12 OR S14)
 S19 5 RD (unique items)
 S20 227354 SPHYGMOMANOMET? OR BODY() (FAT OR TEMPERATURE) OR BLOOD() PRESSURE OR HEART() RATE? ? OR HEARTRATE OR BODY() (WEIGHT OR MASS) OR BMI
 S21 5 S1(S) (S2 OR S4 OR S20)
 S22 5 S21 NOT (S10 OR S12 OR S14 OR S18)
 S23 4 RD (unique items)
 ? show files
 File 9:Business & Industry(R) Jul/1994-2006/Jan 25
 (c) 2006 The Gale Group
 File 16:Gale Group PROMT(R) 1990-2006/Jan 26
 (c) 2006 The Gale Group
 File 160:Gale Group PROMT(R) 1972-1989
 (c) 1999 The Gale Group
 File 148:Gale Group Trade & Industry DB 1976-2006/Jan 26
 (c) 2006 The Gale Group
 File 621:Gale Group New Prod.Annou. (R) 1985-2006/Jan 26
 (c) 2006 The Gale Group
 File 441:ESPICOM Pharm&Med DEVICE NEWS 2006/Oct W3
 (c) 2006 ESPICOM Bus.Intell.
 File 149:TGG Health&Wellness DB(SM) 1976-2006/Jan W3
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 File 15:ABI/Inform(R) 1971-2006/Jan 26
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 File 624:McGraw-Hill Publications 1985-2006/Jan 26
 (c) 2006 McGraw-Hill Co. Inc
 File 47:Gale Group Magazine DB(TM) 1959-2006/Jan 26
 (c) 2006 The Gale group
 File 141:Readers Guide 1983-2004/Dec
 (c) 2005 The HW Wilson Co
 File 484:Periodical Abs Plustext 1986-2006/Jan W4
 (c) 2006 ProQuest

Set	Items	Description
S1	7121	AU=(HASEGAWA H? OR HASEGAWA, H?)
S2	1186	AU=(KOSAKA K? OR KOSAKA, K?)
S3	533	AU=(NAGATSUKA T? OR NAGATSUKA, T?)
S4	105	AU=(UCHIKOSHI M? OR UCHIKOSHI, M?)
S5	2	S1 AND S2 AND S3 AND S4

File 347:JAPIO Nov 1976-2005/Aug(Updated 051205)
(c) 2005 JPO & JAPIO

File 350:Derwent WPIX 1963-2006/UD,UM &UP=200605
(c) 2006 Thomson Derwent

5/5/1 (Item 1 from file: 347)
DIALOG(R) File 347:JAPIO
(c) 2005 JPO & JAPIO. All rts. reserv.

08170810 **Image available**
SYSTEM FOR MANAGING HEALTH

PUB. NO.: 2004-283570 [JP 2004283570 A]
PUBLISHED: October 14, 2004 (20041014)
INVENTOR(s): HASEGAWA HIROKI
KOSAKA KAZUHIRO
NAGATSUKA TAKAHIKO
UCHIKOSHI MICHIKO
APPLICANT(s): TANITA CORP
APPL. NO.: 2004-058574 [JP 200458574]
FILED: March 03, 2004 (20040303)
PRIORITY: 2003-057010 [JP 200357010], JP (Japan), March 04, 2003
(20030304)
INTL CLASS: A61B-005/00; A61B-005/021; A61B-005/05; A61B-005/22;
G06F-017/60

ABSTRACT

PROBLEM TO BE SOLVED: To provide a health managing system for allowing a user to pay close attention to an advice message related to health, and simply managing data of a body fat meter and a pedometer, etc., by a personal computer.

SOLUTION: The system includes: an input means for inputting biological data; a display means for displaying the data; and an advice display means for displaying a health advice, based on the data. The advice display means performs display with a dynamic image wherein the person of the dynamic image moving his/her mouth and hand indicates the advice in a word balloon by hand. The system also includes: a biological data measuring instrument for measuring biological data; and a receiver for receiving the biological data from the instrument. The input means fetches the biological data from the receiver.

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5/5/2 (Item 1 from file: 350)
DIALOG(R) File 350:Derwent WPIX
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016587624 **Image available**
WPI Acc No: 2004-746359/200473
XRPX Acc No: N04-589560

Health care system has advice display unit for displaying advice related to health, such that human animated character points to advice within balloon in hand while moving mouth and waving hand
Patent Assignee: TANITA KK (TANI-N); TANITA CORP (TANI-N)
Inventor: HASEGAWA H ; KOSAKA K ; NAGATSUKA T ; UCHIKOSHI M
Number of Countries: 002 Number of Patents: 002
Patent Family:
Patent No Kind Date Applcat No Kind Date Week
US 20040199057 A1 20041007 US 2004785028 A 20040225 200473 B
JP 2004283570 A 20041014 JP 200458574 A 20040303 200473

Priority Applications (No Type Date): JP 200357010 A 20030304

Patent Details:

Patent No	Kind	Lan Pg	Main IPC	Filing Notes
US 20040199057	A1	25	A61B-005/00	
JP 2004283570	A	14	A61B-005/00	

Abstract (Basic): US 20040199057 A1

NOVELTY - The system includes input unit for inputting human body data such as body fat rate, body fat mass, total energy consumption, and display unit for displaying the inputted data. An advice display unit displays an advice related to health, such that human animated character points to the advice within a balloon in a hand while moving mouth and waving hand.

USE - Health care system for controlling human body measurement data such as body weight, body fat mass, visceral fat level, highest blood pressure, lowest blood pressure, by advising user about health.

ADVANTAGE - Enables relieving tension involved in human.

DESCRIPTION OF DRAWING(S) - The drawing shows a block diagram of the health care system.

- sphygmomanometer (1)
- pedometer (2)
- body fat meter (3)
- receiver (4)
- personal computer (5)
- Internet (6)
- data server (7)

pp; 25 DwgNo 1/17

Title Terms: HEALTH; CARE; SYSTEM; ADVICE; DISPLAY; UNIT; DISPLAY; ADVICE; RELATED; HEALTH; HUMAN; ANIMATED; CHARACTER; POINT; ADVICE; BALLOON; HAND ; MOVE; MOUTH; WAVE; HAND

Derwent Class: P31; S05; T01

International Patent Class (Main): A61B-005/00

International Patent Class (Additional): A61B-005/021; A61B-005/05; A61B-005/22; G06F-017/60

File Segment: EPI; EngPI

?

Set	Items	Description
S1	14660	AU=(HASEGAWA H? OR HASEGAWA, H?)
S2	4312	AU=(KOSAKA K? OR KOSAKA, K?)
S3	252	AU=(NAGATSUKA T? OR NAGATSUKA, T?)
S4	93	AU=(UCHIKOSHI M? OR UCHIKOSHI, M?)
S5	0	S1 AND S2 AND S3 AND S4
S6	118	S1:S4 AND (PEDOMETER? OR PEDOMETRE? OR BLOOD()PRESSURE OR - BODY()FAT OR SPHYGMOMANOMETER?)
S7	92	RD (unique items)
S8	3	S1:S4 AND (PEDOMETER? OR PEDOMETRE? OR SPHYGMOMANOMETER? OR BODY()FAT()(METER? ? OR METRE? ?))
S9	3	RD (unique items)
S10	1	S1:S4 AND ((HEART()RATE OR HEARTRATE) ()(MONITOR? ? OR RECO- RDER? ?))
S11	0	S10 NOT S8
File	155: MEDLINE(R) 1951-2005/Dec 16	
	(c)	format only 2006 Dialog
File	73: EMBASE 1974-2006/Jan 23	
	(c)	2006 Elsevier Science B.V.
File	5: Biosis Previews(R) 1969-2006/Jan W3	
	(c)	2006 BIOSIS
File	94: JICST-EPlus 1985-2006/Nov W2	
	(c)	2006 Japan Science and Tech Corp(JST)
File	144: Pascal 1973-2006/Jan W1	
	(c)	2006 INIST/CNRS
File	34: SciSearch(R) Cited Ref Sci 1990-2006/Jan W2	
	(c)	2006 Inst for Sci Info
File	434: SciSearch(R) Cited Ref Sci 1974-1989/Dec	
	(c)	1998 Inst for Sci Info

9/5/3 (Item 1 from file: 94)

DIALOG(R) File 94:JICST-EPlus

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04208128 JICST ACCESSION NUMBER: 99A0574222 FILE SEGMENT: JICST-E

Application of Physiological Cost Index(PCI) and Long-Term Ambulatory
Physiological Cost Index(LAPCI) in Rheumatoid Arthritis Patients.

MITSUI T (1); HASEGAWA H (1); TAKAYANAGI F (1); HONJO H (1); HATTORI T
(1)

(1) Aichi Medical Univ.

Chubu Riumachi (Journal of the Chubu Rheumatism Association), 1999,
VOL.30,NO.2, PAGE.121-126, FIG.4, TBL.1, REF.7

JOURNAL NUMBER: Y0938ABX ISSN NO: 0916-6033

UNIVERSAL DECIMAL CLASSIFICATION: 616.7

LANGUAGE: English COUNTRY OF PUBLICATION: Japan

DOCUMENT TYPE: Journal

ARTICLE TYPE: Original paper

MEDIA TYPE: Printed Publication

ABSTRACT: Diurnal activity of RA patients was studied using a long-term heart rate recorder and pedometer throughout a 24-hour period. The patients were totally unrestricted and continued their normal lifestyle. The long-term ambulatory physiological cost index(LAPCI) was determined from the heart rate and total step numbers. LAPCI was considered to indicate the energy consumption efficiency of physical performance, to reflect physical strength, and it was measured in 50 RA patients and 15 normal subjects. In comparison with PCI, LAPCI can distinctly evaluate energy consumption efficiency depending on walking ability. LAPCI thus provides a technique for reproducibly quantifying the physical disabilities caused by inflammatory joint disease. (author abst.)

DESCRIPTORS: rheumatoid arthritis; heartbeat; walking; human(primates); maximum oxygen in-take; activity of daily living; physical examination

BROADER DESCRIPTORS: arthritis; inflammation; disease; joint disease; bone and joint disease; collagen disease; connective tissue disease; autoimmune disease; immunologic disease; rheumatism; hemodynamics; motion; diagnosis

CLASSIFICATION CODE(S): GG03000T

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